

AMENDMENT

In the Claims:

This listing of claims will serve to replace all prior versions and listings of claims in the present application:

1. (Currently amended) A rotary liquefied natural gas boil-off compressor comprising

at least two compression stages in series,

a gas passage passing through the series of the compression stages,

the gas passage extending through and being in heat exchange relationship with at least one cooling means disposed between the compression stages, wherein

the at least one cooling means [[is]] comprising [[a]] cryogenic cooling means having valve means for controlling flow of cryogenic coolant into the cryogenic cooling means in response to an inlet temperature $[[.]]$ or a related parameter $[[.]]$ of the compression stage next in series downstream of the cryogenic cooling means to maintain said inlet temperature at a temperature between chosen sub-ambient temperature limits $[[.]]$; wherein the cryogenic cooling means further comprises

direct cooling means,

a chamber in the direct cooling means,

an inlet for the chamber for introduction of the cryogenic coolant to the chamber, and

an outlet for the chamber in communication with a vessel adapted to disengage particles of liquid from natural gas, the vessel having a vessel outlet for the natural gas in communication with said compression stage next in series.

- 2-5. Canceled.
6. (Currently amended) The compressor according to claim 1, further comprising a cryogenic cooling means disposed intermediate each pair of successive compression stages.
7. (Currently amended) The compressor according to claim 1, wherein there are comprising at least three compression stages in sequence, at least one direct cryogenic cooling means and at least one indirect cryogenic cooling means.
8. Canceled.
9. (Previously amended) The compressor according to claim 1, comprising a cryogenic cooling means downstream of a final stage of the series of compression stages.
10. (Previously amended) The compressor according to claim 1, comprising a cryogenic cooling means upstream of a first stage of the series of compression stages.

11. (Previously amended) The compressor according to claim 1, wherein the compressor comprises an intermediate inlet communicating with a forced liquefied natural gas vaporiser.
 12. (Currently amended) A liquefied natural The compressor according to
claim 1, further comprising a gas storage tank having [[an]] a tank outlet
for boiled-off natural gas communicating with the compressor of claim 1,
said cryogenic cooling means of said compressor in communication with
the liquefied natural gas in the gas storage tank.
- 13-16. Canceled.